

FORM PTO-1390 (Modified) U.S. PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE (REV. 7-2005)		ATTORNEY'S DOCKET NUMBER 285137US0XPCT
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371		U.S. APPLICATION NO. (If known, see 37 CFR 1.5) 10/565595
INTERNATIONAL APPLICATION NO. PCT/JP04/10459	INTERNATIONAL FILING DATE 23 July 2004	PRIORITY DATE CLAIMED 24 July 2003 earliest
TITLE OF INVENTION HETERO TYPE PENTAMER RECOMBINANT VACCINE		
APPLICANT(S) FOR DO/EO/US Takeshi ARAKAWA et al.		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<ol style="list-style-type: none"> <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below. <input type="checkbox"/> The US has been elected (Article 31). <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371 (c)(2)) <ol style="list-style-type: none"> <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). <input checked="" type="checkbox"/> has been communicated by the International Bureau. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)) <ol style="list-style-type: none"> <input checked="" type="checkbox"/> is attached hereto. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3)) <ol style="list-style-type: none"> <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). <input type="checkbox"/> have been communicated by the International Bureau. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. <input checked="" type="checkbox"/> have not been made and will not be made. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)). <input type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)). <input type="checkbox"/> A copy of the International Preliminary Examination Report (PCT/IPEA/409). <input checked="" type="checkbox"/> A copy of the International Search Report (PCT/ISA/210). 		
Items 13 to 23 below concern document(s) or information included: <ol style="list-style-type: none"> <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. <input type="checkbox"/> A FIRST preliminary amendment. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment. <input type="checkbox"/> A substitute specification. <input type="checkbox"/> A power of attorney and/or change of address letter. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13/er.2 and 37 CFR 1.821 - 1.825. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4). <input type="checkbox"/> A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4). <input type="checkbox"/> Express Mail Label No. 		

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. APPLICATION NO (if known, see 37 CFR 1.5)		INTERNATIONAL APPLICATION NO.		ATTORNEY'S DOCKET NUMBER																																																																																																																																											
10/1565595		PCT/JP04/10459		285137US0XPCT																																																																																																																																											
23. Other items or information:																																																																																																																																															
<table> <tr> <td>Application Data Sheet</td> <td>Notice of Priority</td> <td>PCT/IB/304</td> <td colspan="3">PCT/IB/308</td> </tr> <tr> <td>PTO-1449</td> <td>References Cited (3)</td> <td>Drawings (7 sheets)</td> <td colspan="3"></td> </tr> <tr> <td colspan="6">Letter Regarding Claim to Small Entity Status</td> </tr> </table>						Application Data Sheet	Notice of Priority	PCT/IB/304	PCT/IB/308			PTO-1449	References Cited (3)	Drawings (7 sheets)				Letter Regarding Claim to Small Entity Status																																																																																																																													
Application Data Sheet	Notice of Priority	PCT/IB/304	PCT/IB/308																																																																																																																																												
PTO-1449	References Cited (3)	Drawings (7 sheets)																																																																																																																																													
Letter Regarding Claim to Small Entity Status																																																																																																																																															
<table> <tr> <td colspan="4">The following fees have been submitted:</td> <td colspan="2">CALCULATIONS PTO USE</td> </tr> <tr> <td colspan="4">24. <input checked="" type="checkbox"/> Basic national fee</td> <td>\$</td> <td>\$300.00</td> </tr> <tr> <td colspan="4">25. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)</td> <td>\$</td> <td>\$200.00</td> </tr> <tr> <td colspan="4">All other situations</td> <td>\$</td> <td>\$200</td> </tr> <tr> <td colspan="4">26. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the International preliminary examination report by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ... Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the as an International Searching Authority. International Search Report prepared by an ISA other than the US and provided to the previously communicated to the US by the IB. All other situations.</td> <td>\$</td> <td>\$400.00</td> </tr> <tr> <td colspan="4">TOTAL OF 24, 25 and 26 =</td> <td>\$</td> <td>\$900.00</td> </tr> <tr> <td colspan="4"><input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.</td> <td>\$</td> <td></td> </tr> <tr> <td>Total Sheets</td> <td>Extra Sheets</td> <td colspan="2">Number of each additional 50 or fraction thereof (round up to a whole)</td> <td colspan="2">RATE</td> </tr> <tr> <td>- 100 =</td> <td>0</td> <td>/50 =</td> <td>0</td> <td>x</td> <td>\$250.00</td> </tr> <tr> <td colspan="6">Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).</td> </tr> <tr> <td>CLAIMS</td> <td>NUMBER FILED</td> <td>NUMBER EXTRA</td> <td colspan="3">RATE</td> </tr> <tr> <td>Total claims</td> <td>21</td> <td>- 20 = 1</td> <td>x</td> <td>\$50.00</td> <td>\$</td> <td>\$50.00</td> </tr> <tr> <td>Independent claims</td> <td>4</td> <td>- 3 = 1</td> <td>x</td> <td>\$200.00</td> <td>\$</td> <td>\$200.00</td> </tr> <tr> <td colspan="6">MULTIPLE DEPENDENT CLAIMS (if applicable) <input checked="" type="checkbox"/> + \$360.00</td> </tr> <tr> <td colspan="6">TOTAL OF ABOVE CALCULATIONS =</td> </tr> <tr> <td colspan="6"><input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.</td> </tr> <tr> <td colspan="6">SUBTOTAL =</td> </tr> <tr> <td colspan="6">Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).</td> </tr> <tr> <td colspan="6">TOTAL NATIONAL FEE =</td> </tr> <tr> <td colspan="6">Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +</td> </tr> <tr> <td colspan="6">TOTAL FEES ENCLOSED =</td> </tr> <tr> <td colspan="6"> <table> <tr> <td>Amount to be</td> <td>\$</td> </tr> <tr> <td>Amount to be</td> <td>\$</td> </tr> </table> </td> </tr> </table>						The following fees have been submitted:				CALCULATIONS PTO USE		24. <input checked="" type="checkbox"/> Basic national fee				\$	\$300.00	25. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)				\$	\$200.00	All other situations				\$	\$200	26. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the International preliminary examination report by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ... Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the as an International Searching Authority. International Search Report prepared by an ISA other than the US and provided to the previously communicated to the US by the IB. All other situations.				\$	\$400.00	TOTAL OF 24, 25 and 26 =				\$	\$900.00	<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.				\$		Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole)		RATE		- 100 =	0	/50 =	0	x	\$250.00	Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).						CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE			Total claims	21	- 20 = 1	x	\$50.00	\$	\$50.00	Independent claims	4	- 3 = 1	x	\$200.00	\$	\$200.00	MULTIPLE DEPENDENT CLAIMS (if applicable) <input checked="" type="checkbox"/> + \$360.00						TOTAL OF ABOVE CALCULATIONS =						<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.						SUBTOTAL =						Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).						TOTAL NATIONAL FEE =						Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +						TOTAL FEES ENCLOSED =						<table> <tr> <td>Amount to be</td> <td>\$</td> </tr> <tr> <td>Amount to be</td> <td>\$</td> </tr> </table>						Amount to be	\$	Amount to be	\$
The following fees have been submitted:				CALCULATIONS PTO USE																																																																																																																																											
24. <input checked="" type="checkbox"/> Basic national fee				\$	\$300.00																																																																																																																																										
25. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)				\$	\$200.00																																																																																																																																										
All other situations				\$	\$200																																																																																																																																										
26. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the International preliminary examination report by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ... Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the as an International Searching Authority. International Search Report prepared by an ISA other than the US and provided to the previously communicated to the US by the IB. All other situations.				\$	\$400.00																																																																																																																																										
TOTAL OF 24, 25 and 26 =				\$	\$900.00																																																																																																																																										
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.				\$																																																																																																																																											
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole)		RATE																																																																																																																																											
- 100 =	0	/50 =	0	x	\$250.00																																																																																																																																										
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).																																																																																																																																															
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE																																																																																																																																												
Total claims	21	- 20 = 1	x	\$50.00	\$	\$50.00																																																																																																																																									
Independent claims	4	- 3 = 1	x	\$200.00	\$	\$200.00																																																																																																																																									
MULTIPLE DEPENDENT CLAIMS (if applicable) <input checked="" type="checkbox"/> + \$360.00																																																																																																																																															
TOTAL OF ABOVE CALCULATIONS =																																																																																																																																															
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.																																																																																																																																															
SUBTOTAL =																																																																																																																																															
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).																																																																																																																																															
TOTAL NATIONAL FEE =																																																																																																																																															
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +																																																																																																																																															
TOTAL FEES ENCLOSED =																																																																																																																																															
<table> <tr> <td>Amount to be</td> <td>\$</td> </tr> <tr> <td>Amount to be</td> <td>\$</td> </tr> </table>						Amount to be	\$	Amount to be	\$																																																																																																																																						
Amount to be	\$																																																																																																																																														
Amount to be	\$																																																																																																																																														

10/565595

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

IAP20 Rec'd PCT/PTO 24 JAN 2006

- a. A check in the amount of \$ _____ to cover the above fees is enclosed.
- b. Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.
- c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 15-0030. A duplicate copy of this sheet is enclosed.
- d. Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

Customer Number
22850

SIGNATURE

Norman F. Oblon

NAME

24,618

REGISTRATION NUMBER

Jan 24 2006

DATE

Surinder Sachar
Registration No. 34,423

10/565645
LAP20 REG'D 24 JAN 2006

DOCKET NO.: 285137US0XPCT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Takeshi ARAKAWA, et al.

SERIAL NO.: NEW U.S. PCT APPLICATION

FILED: HEREWITH

INTERNATIONAL APPLICATION NO.: PCT/JP04/10459

INTERNATIONAL FILING DATE: July 23, 2004

FOR: HETERO TYPE PENTAMER RECOMBINANT VACCINE

**REQUEST FOR PRIORITY UNDER 35 U.S.C. 119
AND THE INTERNATIONAL CONVENTION**

Commissioner for Patents
Alexandria, Virginia 22313

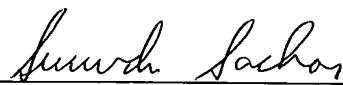
Sir:

In the matter of the above-identified application for patent, notice is hereby given that the applicant claims as priority:

<u>COUNTRY</u>	<u>APPLICATION NO</u>	<u>DAY/MONTH/YEAR</u>
Japan	2003-279156	24 July 2003
Japan	2003-412053	10 December 2003

Certified copies of the corresponding Convention application(s) were submitted to the International Bureau in PCT Application No. PCT/JP04/10459. Receipt of the certified copy(s) by the International Bureau in a timely manner under PCT Rule 17.1(a) has been acknowledged as evidenced by the attached PCT/IB/304.

Respectfully submitted,
OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Norman F. Oblon
Attorney of Record
Registration No. 24,618
Surinder Sachar
Registration No. 34,423

Customer Number

22850

(703) 413-3000
Fax No. (703) 413-2220
(OSMMN 08/03)

10/565595

IAP20 Rec'd FEB 20 24 JAN 2006

DOCKET NO.: 285137US0XPCT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Takeshi ARAKAWA, et al.

SERIAL NO.: NEW U.S. PCT APPLICATION

FILED: HEREWITH

INTERNATIONAL APPLICATION NO.: PCT/JP04/10459

INTERNATIONAL FILING DATE: July 23, 2004

FOR: HETERO TYPE PENTAMER RECOMBINANT VACCINE

LETTER REGARDING CLAIM TO SMALL ENTITY STATUS

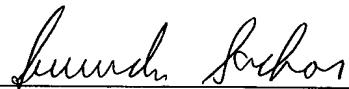
COMMISSIONER FOR PATENTS
Alexandria, VA 22313

SIR:

Applicant(s) hereby give notice that Small Entity Status is claimed in the above-identified application.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Norman F. Oblon
Attorney of Record
Registration No. 24,618
Surinder Sachar
Registration No. 34,423

Customer Number

22850

(703) 413-3000
Fax No. (703) 413-2220
(OSMMN 08/03)